

5/26/2018

Print



Dart Hawkesbury  
1270 Aberdeen St Hawkesbury, ON K6A 1K7 Canada  
Tel (613) 632-5200

## Purchasing Receipts

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit	Aging Days	Past Due	Tot	
PO039872	MES002-VC	1	1	Net 30	M17-4-H900-R2.000	17-4 SS H900 Round Bar 2.000" : M174PH-H900R0.500 MATERIAL: 17-4 PH COND. H900 AS PER AMS 5643				12	5/25/2018	13		S074804	Stock	5/26/2018	\$ 103.80 / ft	0		\$1	
		2			MT-4140-S-1.250X2.000	AISI 4140 Steel Bar : MATERIAL : AISI 4140 / 4142 STEEL SHEET OR PLATE MINIMUM ROCKWELL C = 28 Rc MAXIMUM ROCKWELL C = 32 Rc ASTM A829, AMS 6395				6		6		S074805	Stock	5/26/2018	\$ 29.50 / ft	0		\$	
Total:										18		19									\$1,1

Plex 5/26/2018 7:31 AM Dart Dubois Pascal

METAJX SOLUTIONS INC  
2625 BOUL JACQUES CARTIER EST  
LONGUEUIL, QUEBEC  
J4N 1Y7 **Tel. : 450 641-3330**

## Shipping Order

24/05/2018

**Order** : 135179  
**Reference** : 39872  
**Bid** : 27379  
**Ship** : PICK UP / PICK UP



**Customer :** 6323336

DART AEROSPACE LTD  
1270, ABERDEEN STREET  
HAWKESBURY, ONTARIO  
K6A 1K7

### Ship To

Same

**Tel. :** 1 613 632-3336

Item No.	Description	Qty	Qty. Delivered	B/O Qty
	***** FACTURER E-MAIL ***** SUPER IMPORTANT SUR LE PACKING SLIP INSCRIRE LES HEAT N			
	***** FACTURER E-MAIL ***** SUPER IMPORTANT SUR LE PACKING SLIP INSCRIRE LES HEAT N			
	***** FACTURER E-MAIL ***** SUPER IMPORTANT SUR LE PACKING SLIP INSCRIRE LES HEAT N			
SR2174	17-4PH ROU 2" DIA H900 1 X 12'6" HT.SH0401-DWA41	12.5	12.5	
MP11441H	4140 HTSR PLATE 1.250" THICK 1 X 2" X 72" HT: PM94731	60	60	

ship journey collect  
jp

**Shipping :** \_\_\_\_\_  
**Package No :** \_\_\_\_\_  
**Merchandise Received:** \_\_\_\_\_

**Ref. :** 



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

# **PURCHASE ORDER** **PO039872**

**Supplier:** MES002-VC  
Metaux Solutions  
2625 boul Jacques-Cartier Est  
Longueuil  
QC  
J4N 1L7 Canada  
Phone: 800 558 8858  
Fax: 514 633 8044

**PO No:** PO039872  
**PO Date:** 5/11/18  
**Due Date:** 5/18/18  
**Purchase Order Revision:**  
**Revision Date:**  
**Ship-To Contact:** Phone:

**E-MAILED**  
MAY 11 2018

**Ship To:** 1270 Aberdeen Street  
Hawkesbury  
ON  
K6A 1K7 Canada  
Phone: 613-632-5200

**Via:** Ground  
**Pymt Terms:** Net 30  
**Freight Terms:**  
**Special Comments:** BID NO 27379

## **Items**

Line Item	Part	Supplier Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	M17-4-H900-R2.000		17-4 SS H900 Round Bar 2.000" : M174PH-H900R0.500 MATERIAL: 17-4 PH COND. H900 AS PER AMS 5643	Firmed	5/24/18	12 ft	0 ft 12.5'	12 ft	\$103.80/ft	\$1,245.60
2	MT-4140-S-1.250X2.000		AISI 4140 Steel Bar : MATERIAL : AISI 4140 / 4142 STEEL SHEET OR PLATE MINIMUM ROCKWELL C = 28 Rc MAXIMUM ROCKWELL C = 32 Rc ASTM A829, AMS 6395	Firmed	5/18/18	6 ft	0 ft 6'	6 ft	\$29.50/ft	\$177.00
<b>Grand Total:</b>										<b>\$1,422.60</b>

DAS  
11  
9-89

DAS  
11  
9-89

## **Order Notes**

Procurement Quality Clauses  
A005 right of entry  
A012 chemical and physical test report  
A016 personnel qualification  
A017 raw material identification (as applicable)  
A026 certification of material conformance  
A041 quality management system  
A042 dart notification by supplier  
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit [www.dartaerospace.com](http://www.dartaerospace.com) for further explanation.

Plex 5/11/18 9:17 AM dart.lavoie.chantal

# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M17-4-H900-R2.000

PO / BATCH NO.: 039872/5074804

DATE: MAY 26 2018

MATERIAL CERT REC'D: YES  
 QUANTITY RECEIVED: 13' (12.5)  
 QUANTITY INSPECTED: 13' (12.5)  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 2.000  
 THICKNESS RECEIVED: 2.000  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	
CORRECT FINISH	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	
CORROSION	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	<u>AMS 3643</u>
CORRECT THICKNESS	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	
PHOTO REQUIRED	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	<u>Heat # SH0401-DW/A41</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>DAS 11</u>	SIGNED OFF BY: _____		
DATE: <u>9-29 MAY 26 2018</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

# SPECIFICATION CONTROL DRAWING

**PURCHASE MATERIAL:** 17-4 PH / S17400 / TYPE 630 SS ROUND BAR  
GRAIN MUST BE ALONG LENGTH OF BAR  
MINIMUM YIELD STRENGTH PER TABLE  
MINIMUM ULTIMATE STRENGTH PER TABLE

**SPECIFICATION:** AMS 5643 OR ASTM A564

**PART NUMBER:** M17-4-1 HHHH-R | X.XXX | WHERE: HHHH SPECIFIES THE MATERIAL CONDITION (PER TABLE BELOW)  
COND | O.D. | X.XXX = DIAMETER (IN INCHES)

## MATERIAL CONDITION TABLE:

CODE	CONDITION	MIN YIELD TENSILE STRENGTH (KSI)	MIN ULTIMATE TENSILE STRENGTH (KSI)
(OMITTED)	NONE SPECIFIED (CONDITION A NOT ACCEPTABLE)	100	150
H900	H900	170	190
H925	H925	155	170
H1025	H1025	145	155
H1075	H1075	125	145
H1100	H1100	115	140
H1150	H1150	105	135
CONDA	CONDITION A (SOLUTION TREATED)		

**NOTES:** MATERIAL IN H900 AND H925 CONDITION NOT RECOMMENDED FOR TENSION OR SHEAR APPLICATIONS IN COLD WEATHER CONDITIONS  
MATERIAL IN H900 AND H925 CONDITION NOT RECOMMENDED FOR APPLICATIONS WHERE STRESS CORROSION CRACKING IS POSSIBLE  
CONDITION A NOT TO BE USED IN DESIGN FOR FINAL PRODUCT AND SHOULD ALWAYS BE HEAT TREATED

## EXAMPLES:

**PART** 4.000" DIAMETER BAR MIN UTS = 150 KSI, MIN YTS = 100 KSI  
2.500" DIAMETER BAR H900 CONDITION  
3.250" DIAMETER BAR H1025 CONDITION  
0.750" DIAMETER BAR A CONDITION

**PART NUMBER**  
M17-4-R2.000  
M17-4-H900-R2.500  
M17-4-H1025-R3.250  
M17-4-CONDA-R0.750

RELEASED  
2017-10-31  
E17-725

APPROVED

C	ADDED MATERIAL CONDITION (CIR17-107)	NO	17.09.14
B	REWORK DWS: S17400TYPE 630 ADDED TO PURCHASE MATERIAL (21 08-1), ADD A564 SPEC (C8-1), REF PAR 08-023A	VS	10.05.20
A	NEW ISSUE	CP	05.03.16
REV.	DESCRIPTION	BY	DATE
DESIGN	NO		
DRAWN	NO		
CHECKED	CP		
MFG. APPR.	RA		
APPROVED	WM		
DE APPR.	CP		
DATE	17.09.14		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M17-4-R			
SHEET 1 OF 1			
TITLE 17-4 SS ROUND BAR			
SCALE NTS			
COPYRIGHT © 2005 BY DART AEROSPACE LTD			
THIS DOCUMENT IS THE PROPERTY OF DART AEROSPACE LTD. IT IS TO BE USED FOR THE PURPOSES OF THE CONTRACT TO WHICH IT IS REFERENCED AND IS NOT TO BE USED FOR ANY OTHER PURPOSES WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.			

# CERTIFICATE OF TEST CERTIFICAT D'ESSAIS

Page 01 of 02

Certification Date  
14-MAY-2018

CUSTOMER ORDER NUMBER  
NUMÉRO DE COMMANDE DU CLIENT

Invoice Number  
S707198

44743-J  
PART NUMBER/NUMÉRO DE PIÈCE  
510539

SOLD TO: METAUX SOLUTIONS INC.  
VENDU À:

SHIP TO:  
EXPÉDIÉ À:

2625 BOUL JACQUES CARTIER EST  
LONGUEUIL QC J4N 1L7

METAUX SOLUTIONS (RIVE-SUD)

2625 BOUL JACQUES CARTIER EST  
LONGUEUIL QC J4N 1

Description: 17-4 SOL ANN CF BAR

2 RD X 12' R/L

HEAT: SH0401-DWA41

ITEM: 510539

ASTM A564

Line Total: 134.694 LB

Specifications:

AMS 5643 U

ASTM E112

AMS 2303 F

ASTM A388/A388M 16

EN 10204 3.1

ASTM A564 T630 13

AMS 2315

ASTM A564M 13

NACE MR0175

ASME SA564 T630 13

ASTM E340

ASME SA4564 13

ASTM F899 12B

## CHEMICAL ANALYSIS

C	SI	MN	P	S	NI	CR	MO
0.02	0.50	0.65	0.029	0.001	4.29	15.30	0.08

CU	NBTA	NB	TA
3.46	0.23	0.23	0.0024

RCPT: R315364

COUNTRY OF ORIGIN : TAIWAN

## MECHANICAL PROPERTIES

DESCRIPTION	YLD STR	ULT TEN	%ELONG	%RED	HARDNESS
	KSI	KSI	IN 02 IN	IN AREA	BHN
COND A	181.0	202.0	16.0	56.0	316
DEV: H900 L	181.0	202.0	16.0	56.0	427

GRAIN SIZE : 6 -

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mentionnées sont transcrites du certificat d'essais du manufacturier après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. /Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with mercury while in our possession. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

JOANNE DESPRES



MANAGER QUALITY ASSURANCE  
GÉRANT DE L'ASSURANCE QUALITÉ

# CERTIFICATE OF TEST CERTIFICAT D'ESSAIS

Page 02 of 02

Certification Date  
14-MAY-2018

CUSTOMER ORDER NUMBER  
NUMÉRO DE COMMANDE DU CLIENT

44743-J

Invoice Number  
S707198

PART NUMBER/NUMÉRO DE PIÈCE

510539

SOLD TO:	METALUX SOLUTIONS INC.	SHIP TO:	METALUX SOLUTIONS (RIVE-SUD)
VENDU À:	2625 BOUL JACQUES CARTIER EST LONGUEUIL QC J4N 1L7	EXPÉDIÉ À:	2625 BOUL JACQUES CARTIER EST LONGUEUIL QC J4N 1

Description: 17-4 SOL ANN CF BAR  
2 RD X 12' R/L

HEAT: SH0401-DWA41

ITEM: 510539

ASTM A564

Line Total: 134.694 LB

MATERIAL IS FREE FROM MERCURY CONTAMINATION  
NO WELD REPAIR PERFORMED ON MATERIAL  
ULTRASONIC: Y  
MACRO: OK  
MICRO: OK

## COMMENTS

country of origin: gmtc, taiwan  
red ratio: 68.1.1  
mfg process: air melting (eaf+lhf+vod); forged or hot rolled  
solution treatment: 1900 +/- 25 deg F for 30 min/inch (min of 1/2 hr),  
rapidly cooled to below 90 deg F  
ferrite: 0.3%

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mencionnées sont transcrites du certificat d'essais du fabricant après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specifications forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. /Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with mercury while in our possession. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

JOANNE DESPRES



MANAGER QUALITY ASSURANCE  
GÉRANT DE L'ASSURANCE QUALITÉ

# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-4140-S-1.250x2.000  
 DATE: MAY 26 2018

PO / BATCH NO.: 039872/S024805

MATERIAL CERT REC'D: yes  
 QUANTITY RECEIVED: 61  
 QUANTITY INSPECTED: 61  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.250  
 THICKNESS RECEIVED: 1.250  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="radio"/> N	
CORRECT FINISH	<input checked="" type="radio"/> Y	<input type="radio"/> N	
CORROSION	Y	<input checked="" type="radio"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y	<input type="radio"/> N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y	<input type="radio"/> N	<u>Astm A329</u>
CORRECT THICKNESS	<input checked="" type="radio"/> Y	<input type="radio"/> N	
PHOTO REQUIRED	Y	<input checked="" type="radio"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y	<input type="radio"/> N	<u>Heat # Pm94731</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y	<input type="radio"/> N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y	<input type="radio"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS</u> DATE: <u>11</u> <u>9-89</u> <u>MAY 26 2018</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

CERTIFICAT D'ANALYSE

DART AEROSPACE LTD  
1270, ABERDEEN STREET  
HAWKESBURY, ONTARIO  
K6A 1K7

25 mai 2018

**Part Number/ Description**

MST12500

Plate 1-174

34.00000 x 146.00000

ASTM A-829

DFARS Compliant

Lot: 425801A

**Shipped Qty**

1,795 Pounds

PM Heat: 94731

BHN: 308

C: 0.4070

Mn: 0.7600

P: 0.0070

S: 0.0010

Si: 0.2010

Cr: 0.9700

Mo: 0.1500

Cu: 0.2160

V: 0.0350

Ni: 0.1500

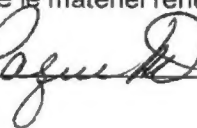
ITEM 2: 1 X 2" X 72"

COMMANDE : 135179

REF : 39872

Métaux Solutions inc. certifie que les analyses sur ce document sont exactes et que le matériel rencontre les spécifications énumérées.

Préparé par



REV.	DESCRIPTION	ECN #	DATE	BY	APPROVED
A	NEW ISSUE	18-544	18.2.13	VM	ML

## SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL : AISI 4140 / 4142 STEEL SHEET OR PLATE  
 MINIMUM ROCKWELL C = 28 Rc  
 MAXIMUM ROCKWELL C = 32 Rc

SPECIFICATION: ASTM A829 AMS 6395

PART NUMBER:

MT-4140-S-(T.TTT) x (W.WWW)  
 WHERE "T.TTT" = THICKNESS IN INCHES  
 WHERE "W.WWW" = WIDTH IN INCHES (OPTIONAL FOR SPECIFYING CUT PLATE)

EX. 0.063" THICK SHEET = MT-4140-S-0.063  
 EX. 3.5" WIDE BY 0.500" THICK PLATE = MT-4140-S-0.500X3.500

<b>DART AEROSPACE</b> <small>Newbury, Ontario, Canada</small>	
TITLE AISI 4140 / 4142 STEEL SHEET OR PLATE	
PART NO. MT-4140-S	REV. A
THIS SET CONTAINS THE FOLLOWING SHEETS: DIMENSIONS ARE IN INCHES DIMENSIONS APPLY AFTER FINISHING	
DESIGNED BY: VM 2/13/2018	TOLERANCES: ± 1/8
DRAWN BY: VM 02/13/2018	± .005
CHECKED BY: VM 02/13/2018	± .1
APPROVED BY: DD 02/13/2018	± .1
APPROVED BY: ML 02/14/2018	SCALE: NTS
SHEET 1 OF 1	
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